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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,793	04/20/2001	Debabrata Mukherjee	00-40051-US	3017

7590 05/15/2003

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/839,793

Applicant(s)

MUKHERJEE ET AL.

Examiner

Betelhem Shewareged

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-98 is/are pending in the application.
- 4a) Of the above claim(s) 2-12 and 55-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 13-54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Species A (claims 1, 13-54) in Paper No. 5 is acknowledged. The traversal is on the ground that the examiner will not be required to make additional search for the invention in Group II. This is not found persuasive because as showed in the previous Office Action, the invention in Group I is required to be searched in class 428 and the invention in Group II is required to be searched in class 524, and thus searching in two different areas put an undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Non-elected claims 2-12 and 55-98 are withdrawn from consideration.

Claim Objections

3. Claim 1 is objected to because of the following informalities: It is not clear if at least one of the cold release layer, wash layer or ink receptive layer is self-standing. Appropriate correction is required.

4. Claims 22, 23, 53 and 54 are objected to because of the following informalities: The term "gsm" is neither defined in the specification nor does it have a well-defined meaning in the art. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kronzer (US 5,501,902).

Kronzer discloses an ink jet printable material comprising a first layer, a third layer over the first layer and a second ink receptive layer over the third layer (claim 27). The first layer is equivalent to the claimed cold release layer, the third layer is equivalent to the claimed wash layer and the second layer is equivalent to the claimed ink receptive layer.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Kronzer (US 6,200,668 B1).

Kronzer discloses an ink jet printable heat transfer material comprising a second layer, a third layer and a fourth layer in the order thereof (claim 8). The second layer is equivalent to the claimed cold release layer, the third layer is equivalent to the claimed

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wash layer and the fourth layer is equivalent to the claimed ink receptive layer. The heat transfer material has cold release properties (col. 4, line 25). The second layer is composed of hard acrylic and release-enhancing additives, and it separated from the third layer at a time of transfer (col. 5, lines 40-63). The third layer functions as a transfer coating to improve the adhesion of subsequent layers in order to prevent premature delamination of heat transfer material, and it is composed of ethylene-acrylic acid, polyurethane, waxes, plasticizer and antioxidants (col. 5, line 64 thru col. 7, line 9). The fourth layer is an ink jet printable layer, and is composed of thermoplastic polymer particle, film-forming binder and cationic polymer (col. 7, lines 21-52).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Boyd et al. (US 6,071,368).

Boyd discloses an ink jet transfer sheet comprising a backing layer, a detachable release layer on the backing layer and an ink receiving layer on the release layer (claim 1). The backing layer is equivalent to the claimed cold release layer, the release layer

is equivalent to the claimed wash layer and the ink receiving layer is equivalent to the claimed ink receptive layer.

Allowable Subject Matter

11. Claims 13-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest arts Kronzer '668, Boyd and Kronzer '902 neither teach nor suggest a transfer media comprising a cold release layer composed of silicone, crosslinker and controlled release additives; a wash layer composed of ethylene acrylic acids, non-water soluble plasticizer, ethylene-vinyl chloride, urethane adhesion promoter, fluorosurfactant wetting and flow agent, copolyamine resin, hard waxes, non-water soluble antioxidants, and a mixture of water soluble and non-water soluble cationic polymers; and an ink receptive layer composed of hard wax, high porosity powder, or ethylene-vinyl chloride emulsion, water soluble cationic polymer, non-water soluble cationic polymer, non-water soluble plasticizer, non-water soluble antioxidant, a mixture of flow and wetting agent, and high porosity inorganic material.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 703-305-0389. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

BS

May 10, 2003.

A handwritten signature in black ink, appearing to be 'BS' followed by a stylized flourish.